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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,077	08/11/2003	Joseph Hillman	SSI-08100	6943

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EXAMINER	
KACKAR, RAM N	
ART UNIT	**PAPER NUMBER**
1763	

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/639,077	HILLMAN, JOSEPH	
	Examiner	Art Unit	
	Ram N. Kackar	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *13-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 33-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *several*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujikawa et al (JP 10335408).

Fujikawa et al disclose a process chamber for processing with super critical processing (Paragraph 1 in the English translation) and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 1- Fig 4 and abstract) sized to contain semiconductor wafers, a second chamber housing and means to bring it into and out of contact with the first chamber housing and deforming means (7b) mounted on the second chamber housing between the surface of the housing and the moveable member.

3. Claims 1-10 and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Tseronis et al (US 6508259).

Tseronis et al disclose a process chamber for processing with super critical processing (Col 2 lines 41-50) and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 4-123 and 1a) sized to contain semiconductor wafers, a second chamber housing (3a) and means to bring it into and out of contact with the first chamber

housing and deforming means (5a) mounted on the second chamber housing between the surface of the housing and the moveable member.

4. Claims 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyagi et al (US 5433784).

Miyagi et al disclose a process chamber and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 1-1) sized to contain semiconductor wafers, a second chamber housing (18), means to bring it into and out of contact with the first chamber housing (13) with a rotary action (motor) and deforming means (17 and 18) mounted on the second chamber housing between the surface of the housing and the moveable member (13).

Regarding second chamber housing defining a second cavity as in claim 4 is a matter of shape since either housing could define a cavity to hold work pieces.

Regarding change in shape: It was held in *re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)* that the shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular shape was significant. (Also see MPEP 2144.04(d)).

5. Claims 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by LeBlanc III et al (US 5709785).

LeBlanc III et al disclose process chambers and disclose an apparatus to close the chambers comprising first chamber housing with a cavity (Fig 1-16) sized to contain substrates, second chamber housing (Fig 2A-2), means to bring it into and out of contact with the first chamber housing (22) with a rotary action (motor) (Fig 1-24) and deforming means (38a, 38b and 37c) mounted on the second chamber housing in grooves (37a, 37b and 37c) between the

surface of the housing and the moveable member (22). LeBlanc III et al teach that these enable the collar 33 to move on its axis slightly (Col 4 line 60- Col 5 line 30).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toru Yasuda (JP 2000-106358) in view of Miyagi et al (US 5433784).

Yasuda et al disclose a process chamber for processing with super critical processing and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (abstract and Fig 1) sized to contain semiconductor wafers, a second chamber housing (110) and means to bring it into and out of contact with the first chamber housing (111).

Yasuda et al do not disclose deforming means.

Miyagi et al disclose a process chamber and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 1-1) sized to contain semiconductor wafers, a second chamber housing (18), means to bring it into and out of contact with the first chamber housing (13) with a rotary action (motor) and deforming means (17 and 18) mounted on the second chamber housing between the surface of the housing and the moveable member (13).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to use deforming means on apparatus of Yasuda to bring the closing part aligned and smooth with the open part.

Regarding second chamber housing defining a second cavity as in claim 4 is a matter of shape since either housing could define a cavity to hold work pieces.

Regarding change in shape: It was held in *re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)* that the shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular shape was significant. (Also see MPEP 2144.04(d)).

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toru Yasuda (JP 2000-106358) in view of Miyagi et al (US 5433784) as applied to claims 1-10 and further in view of Masayasu Suzuki (JP 04103768) and Tanabe et al (US 5304422).

Miyagi et al disclose a process chamber and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 1-1) sized to contain semiconductor wafers and a second chamber housing (18), means to bring it into and out of contact with the first chamber housing (13) with a rotary action (motor) and deforming means (17 and 18) mounted on the second chamber housing between the surface of the housing and the moveable member (13).

Toru Yasuda in view of Miyagi et al fails to disclose that the deforming material could be a polymer.

Masayasu Suzuki teaches that a polymer like polyimide resin is an elastic material (Abstract). Masayasu Suzuki uses this as a heat resistant elastic (deforming) member to hold

substrates. Further Tanabe et al teach that polyimide resin has excellent mechanical and physical properties like low frictional force and low abrasion.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to use polyimide resin material in place of springs for their excellent heat resistance and physical and mechanical properties.

9. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagi et al (US 5433784) in view of Masayasu Suzuki (JP 04103768) and Tanabe et al (US 5304422).

Miyagi et al disclose a process chamber and disclose an apparatus to close the chamber comprising first chamber housing with a cavity (Fig 1-1) sized to contain semiconductor wafers and a second chamber housing (18), means to bring it into and out of contact with the first chamber housing (13) with a rotary action (motor) and deforming means (17 and 18) mounted on the second chamber housing between the surface of the housing and the moveable member (13).

Miyagi et al fails to disclose that the deforming material could be a polymer.

Masayasu Suzuki teaches that a polymer like polyimide resin is an elastic material (Abstract). Masayasu Suzuki uses this as a heat resistant elastic (deforming) member to hold substrates. Further Tanabe et al teach that polyimide resin has excellent mechanical and physical properties like low frictional force and low abrasion.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to use polyimide resin material in place of springs for their excellent heat resistance and physical and mechanical properties.

10. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeBlanc III et al (US 5709785) in view of Masayasu Suzuki (JP 04103768) and Tanabe et al (US 5304422).

LeBlanc III et al disclose process chambers and disclose an apparatus to close the chambers comprising first chamber housing with a cavity (Fig 1-16) sized to contain substrates, second chamber housing (Fig 2A-2), means to bring it into and out of contact with the first chamber housing (22) with a rotary action (motor) (Fig 1-24) and deforming means (38a, 38b and 37c) mounted on the second chamber housing in grooves (37a, 37b and 37c) between the surface of the housing and the moveable member (22). LeBlanc III et al teach that these enable the collar 33 to move on its axis slightly (Col 4 line 60- Col 5 line 30).

LeBlanc III et al fails to disclose that the deforming material could be a polymer.

Masayasu Suzuki teaches that a polymer like polyimide resin is an elastic material (Abstract). Masayasu Suzuki uses this as a heat resistant elastic (deforming) member to hold substrates. Further Tanabe et al teach that polyimide resin has excellent mechanical and physical properties like low frictional force and low abrasion.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to use polyimide resin material as the deforming material of LeBlanc III et al for their excellent heat resistance and physical and mechanical properties.

Response to Arguments

Applicant's arguments filed 1/23/2006 have been fully considered but they are not persuasive. Applicants arguments about deforming means is not persuasive since by its very nature deforming means can deform in all directions.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ram Kackar
Examiner AU 1763